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(12) (A)

(51) Int. Cl.7
G09G 3/30

(11) 10-2004-0067965
(43) 2004 07 30

(21) 10-2004-0003732
(22) 2004 01 19

(30) JP-P-2003-00011046 2003 01 20 (JP)
JP-P-2003-00300684 2003 08 26 (JP)

(71) 가 가 2 5 5

(72) 3 3-20-311

가 가 16-1-903

(74)

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(54)

TR1, / TR1, TR2, , (51) 가 EL (51) 가 EL (51)
C1 , 가 , 가 / C1 ,
(90) , (90) TR2 / TR3 T
R4 .

1 EL
2 1
3
4 2
5
6 3
7
8 4
9 5
10 6 EL
11 6
12
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15 8
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19 10
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22 11
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24 12
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27 EL
28 13
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35 17

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38 EL

39 EL

40 19

41 20

42 21

43 22

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46 24

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48 25

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50

51 EL

52 EL

53

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2 : EL

3 :

4 :

5 :

6 :
7 :
8 :
9 :
50, 51 : EL

54 :

90 :

TR1 :

TR2 :

TR3 :

TR4 :

C, C1, C

SCAN :

EL (, EL ,)
EL , 1
EL (50) 가
TR2 , DATA가 가
C가
TR1 ,
EL SCAN (50)
TR2 ,
C
TR1 ,
C
TR2 ,
C
TR2 ,
EL (50) 가
1

2 ,

가 가

가 가 가

1

가 , 1
가 ,
가 . , 1
() ,
가

가 , 가

1 , , 2 가 1

, 2 , 1 ,

1 , 1 , 2

가 가 .

EL

5

EL (2) 1 (4) , . TV 가 . , (7)
 (5) , (3) (6) (2) (4) .
 RGB 3 가 EL Hsync (3) Vsync 가 (4) .
 (6) (7)

< 8 >

15 (90)	11	,	(51) (50)	(92)	,	2	, 16	1	
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< 9 >

EL (51b, 51c)	,	17 (51a)	,	,		(51a, 51b, 51c) (90)가	,		
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(51a) TR11 , TR2 (51a)	EL	TR2 V _{DD} (50)	(90)	V _{SS} 가	TR2	TR12 V _{DD}
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2	V _{DD} , V _{SS} TR12	C21	2	TR11 TR21, TR22가	TR12가	
	, DD , 1	C21	B가	TR2	, TR23, TR21	V
	TR23	RST1				

,	TR22 TR24 RAMP가	2	V _{SS} RST2가	TR12	TR24	가 TR11 ()
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,	TR12	C21	(51b, 51c)	,	C21	(90)
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(51a, 51b, 51c) SCAN ATA(A) R12, TR21, TR22, TR23	EL	TR1	18		C1	D
가 TR24					TR2, TR11, T	

R11 22가	,	RAMP가 V _{th} TR21	,	V _{DD} TR11	가	
가	,	TR2가	,	V _{DD}	C21	T TR
	,		,	EL	(50)	

가	TR12	,	A V _{th} TR2가	가	V _{DD} TR12가	가
	,	-		,	EL	, B

가	,	, 1 TR21 C21	가	RST1		TR23
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,	2 TR22가	가	,	RST2가 RST1	TR11 가	TR12가 TR24가	가
	,	.	,	, 1	가	TR23	가

< 14 >

30 (51), 1
RAMP2 가 1
RAMP1 가 1
C1 (55), 1
C1 (55), 2
TR32 1
TR32 1
V_{DD}
SCAN
A
B
1
DATA 1
1
1
1
TR31
(57)
TR31
TR32
(57)
TR32
V_{cc} 가
1
(56)
.

31 , , , A 2 2 (57) 가 가 가 C1 , 2
TR32 , 1 (56) A 2 V_{cc} TR32 V_{cc} . A

< 15 >

32 (51) , 2 p TR31, TR32 n

< 16 >

1 TR31 2 TR32
가 , .
33 (51) EL (50) 가 , SCAN 가 1 가 1 C2 ,
V_{DD} TR1 EL (50) (55) 1 TR31 1 TR31 , 1
TR31 2 3 TR32 , 1 TR31
2 C3 TR33 .
1 TR32 3 TR33 2 C3 V_{DD} . 2 TR32 , 2 TR33 1

(51) TR1 3 , 34 TR33 , 1 TR31 1 B SCAN C2가 가 V DD , (A) .

(51) 18 , 18 가 . . , 1
가 . .

< 21 >

42 , 18
EL (50) , , 36 A EL (50) C
1 , B , B
.

< 22 >

43 (51) , 21 RAMP 가 1 (61) 2 (62) SEL , 가
(66) 가 , TR39 , TR39 1 (67) (66)
67) TR39가 21 , 21 , 21
(51) .

< 23 >

44 1 RAMP1 2 가 , 1 1 (71) 1 DATA 가 1 SCAN 가
1 3 (73) , 2 RAMP2 1 (71) (72) , 2 (74) SEL
가 . . RST 1 (72) , 1 DATA 가 . .
V_{DD} (B) EL (50) (50) 1 (6) 1 TR31 , 1 C1 ,
TR31 EL (50) (50) 3 (C) TR35 , V_{DD} 2 B TR32 , V_{DD} 1 C1 ,
TR36 TR36

1 2 TR31 1 (71) 3 (73) 2 TR32 . .
4 TR36 4 (74)
.

45 2 , 1 RAMP2가 4 , TR36 2 , B TR32가 . . RS
T가 . . , RAMP1
.

가 . . , B SCAN 가 C (2 EL TR32가 . . , A . .
2 RAMP2가 . . SEL 3 , A TR35가 . . , 1 RAMP1
TR31 , V_{th} B
EL (50)가 C EL (50) RAMP1
.

2 2 RAMP2 2 , 2 TR32가 . . , 1 RAMP2 C . .
EL V_{th} (50) EL (50)
TR31 TR32
.

V_{th}

(57)

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1 가 , 2 , 1

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가 가 가 , 가 ,
 가 1 가 , 2
 가 2 , 1
 2 가 , 2

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가 가 가 , 가 ,
 가 1 , 2
 2 , 1
 가 , 2
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16.

11 ,

가 가 가 , 가 ,
 가 1 , 2
 가 , 1
 2 , 1
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17.

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가 1 , 1
 2 , 1
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 1 , 2
 2 , 1
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18.

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가 1 , 1
 2 , 1
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 1 , 2
 2 , 1
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11 ,

가 가 가 , 가 1 , , 1
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 가 2 , , 1
 가 3 , 1
 가 , 2
 가 , 1

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11 ,

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 , 1 , , , 2
 가 1 , 1 , , 2
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가

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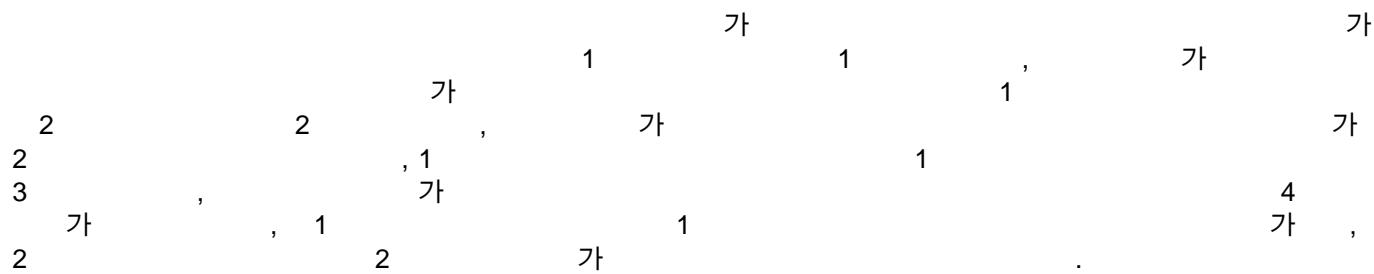
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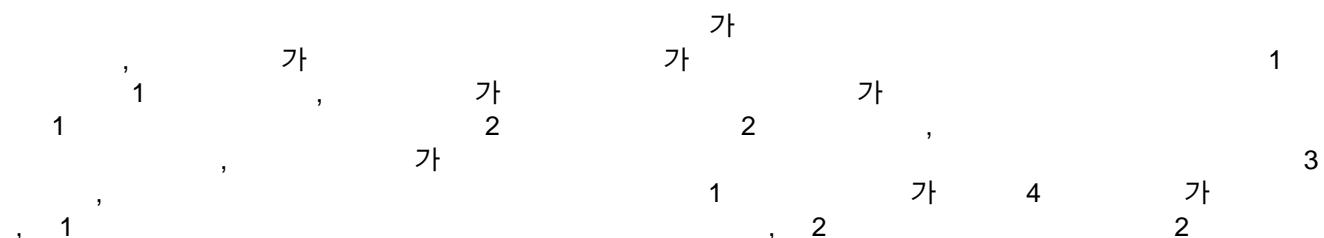
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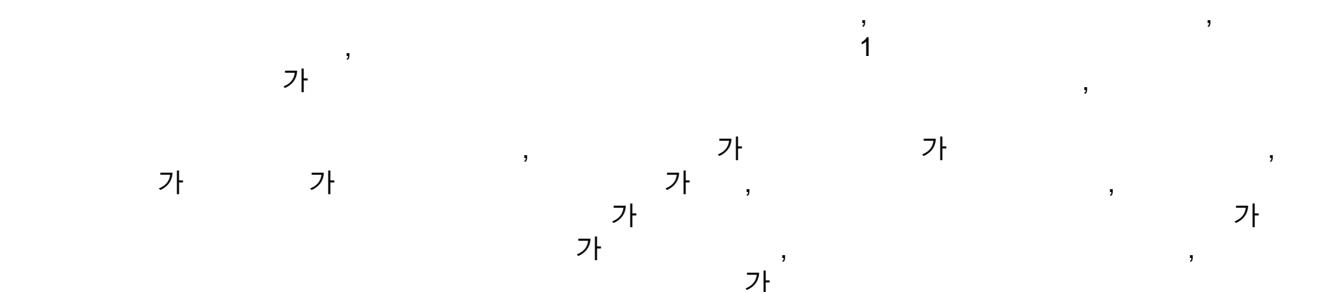


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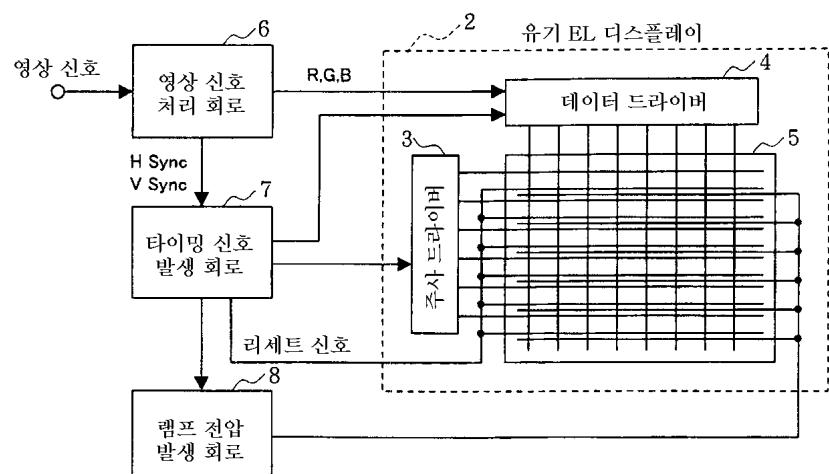
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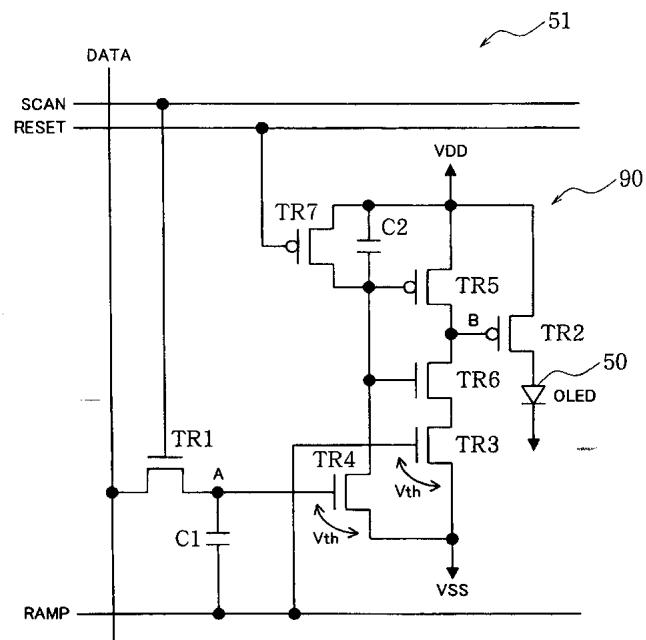
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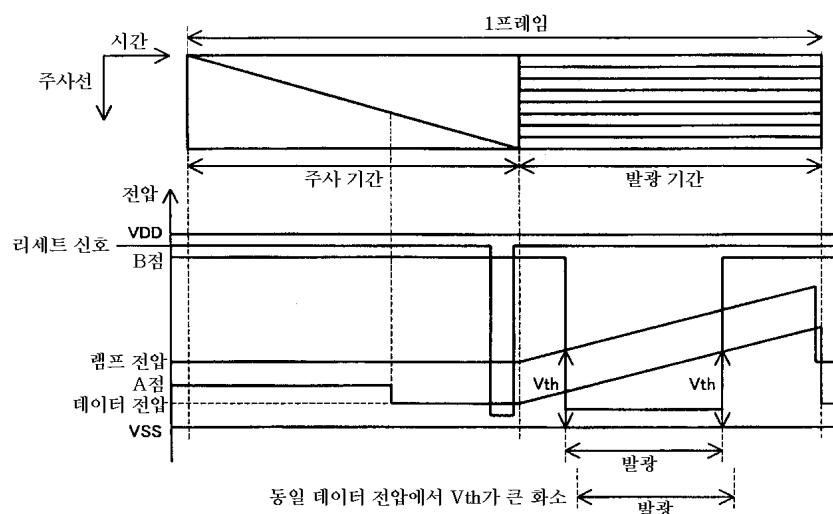
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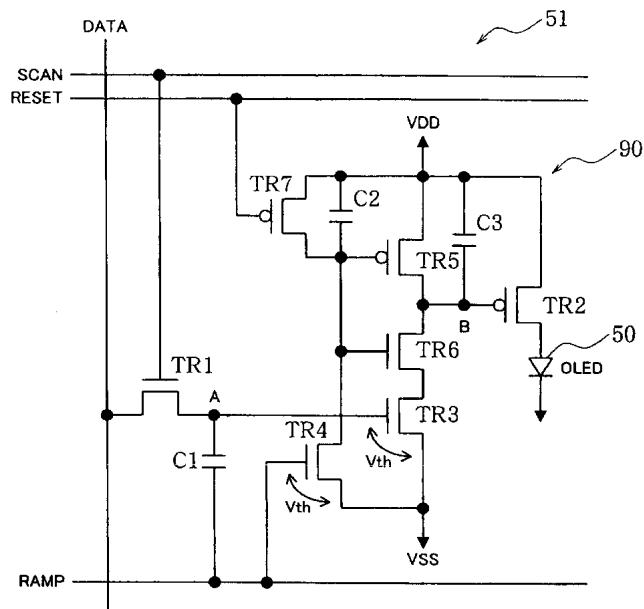
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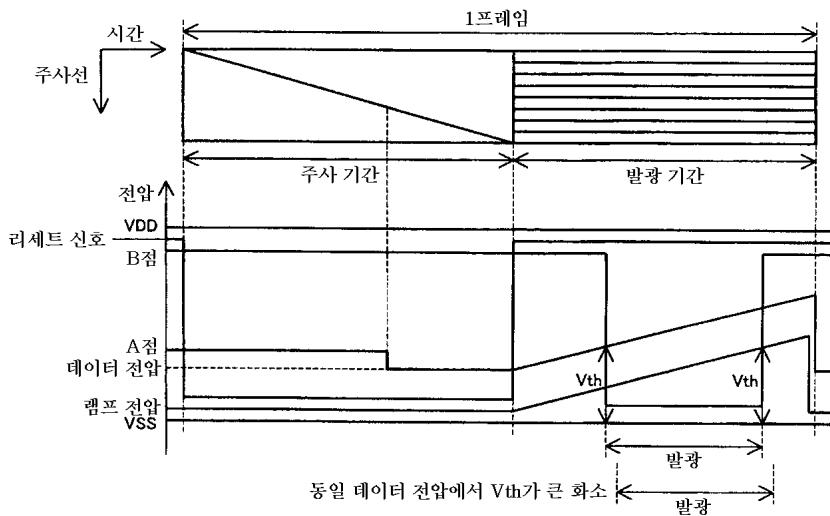
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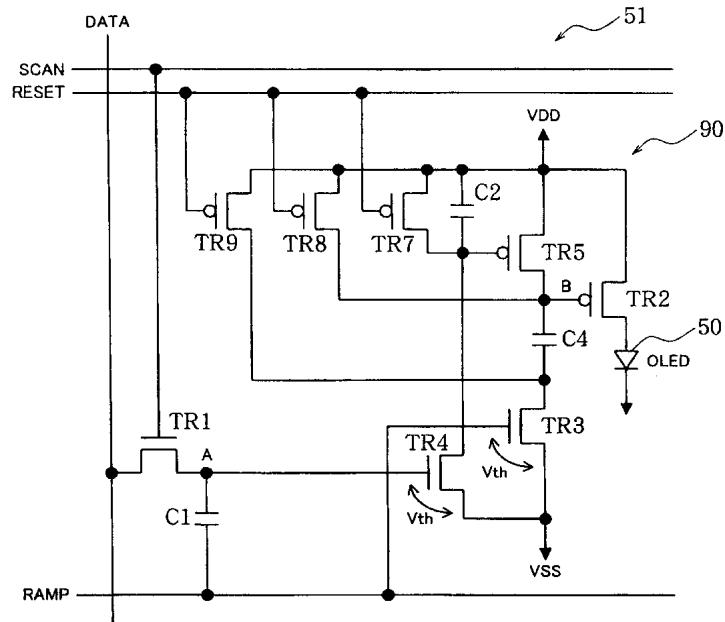
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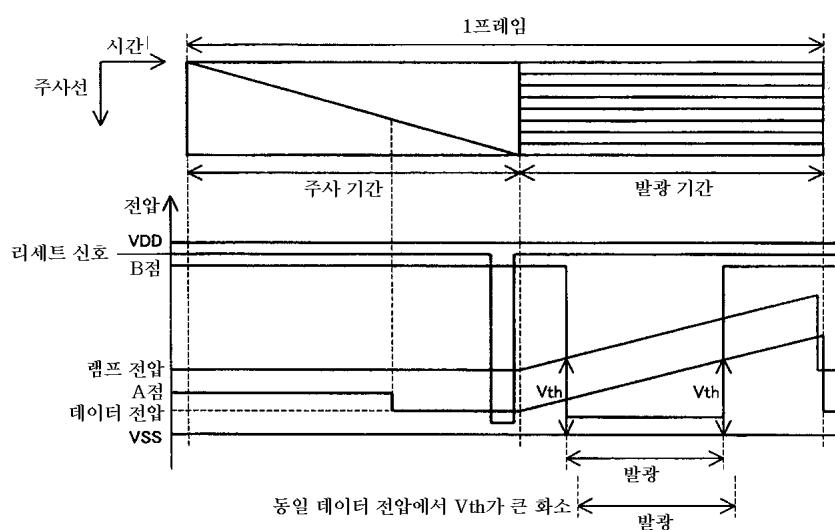
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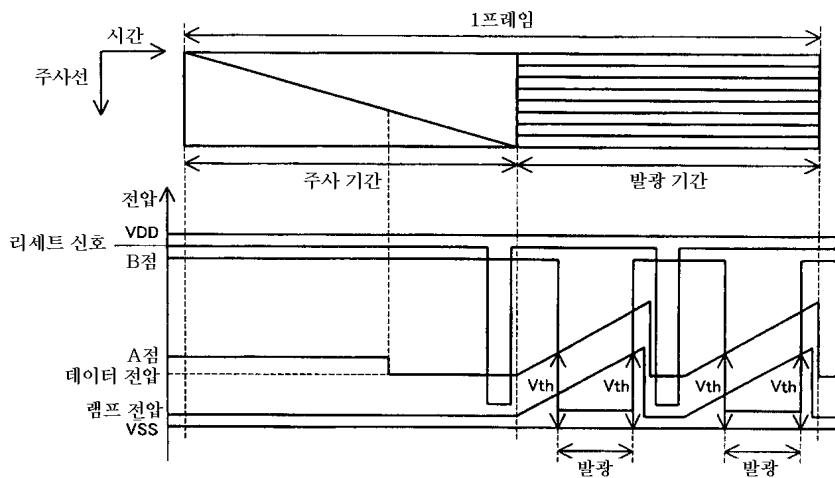
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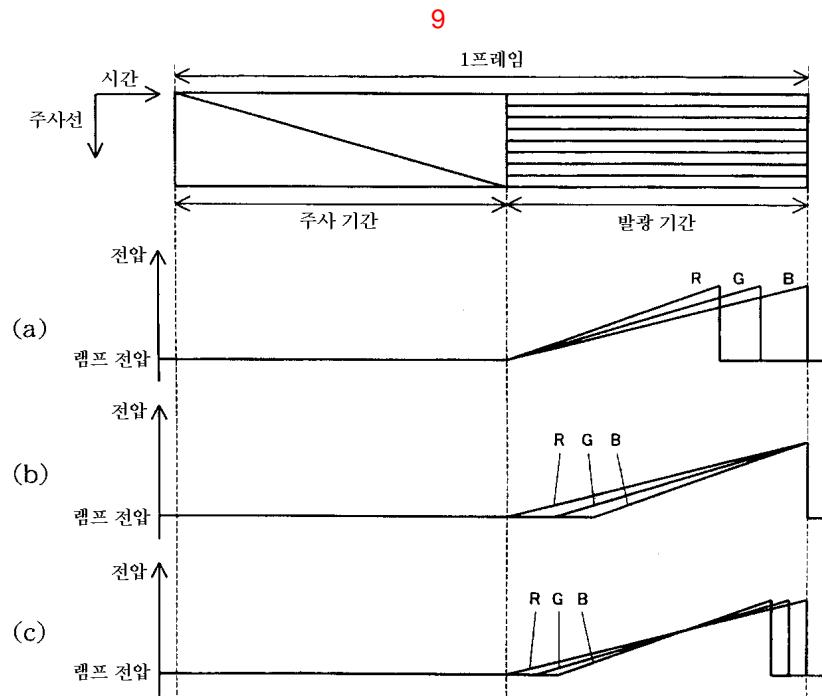


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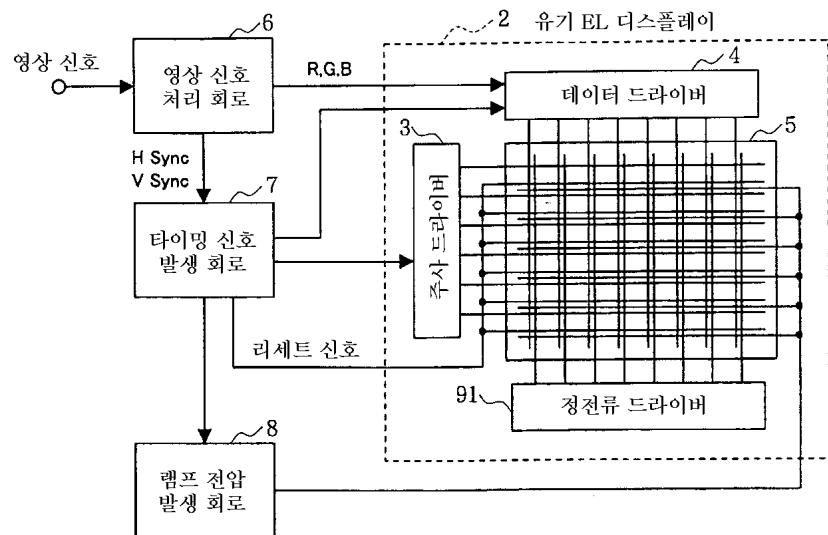


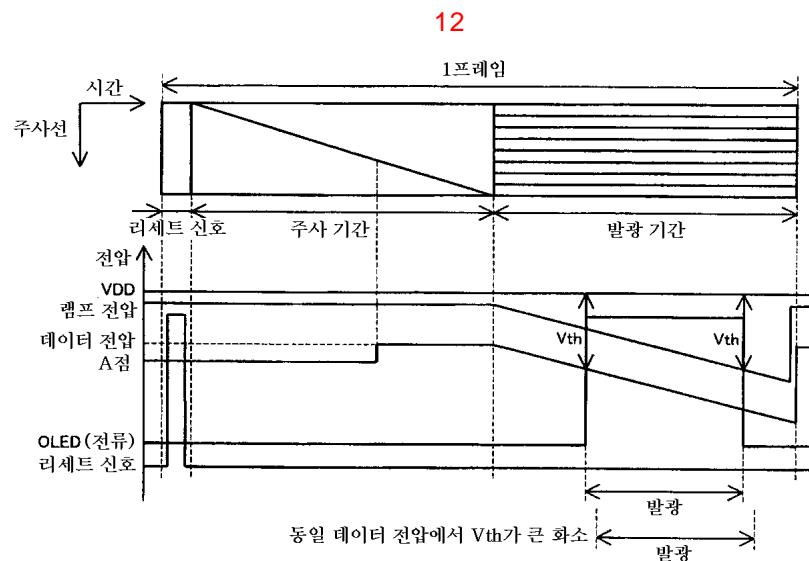
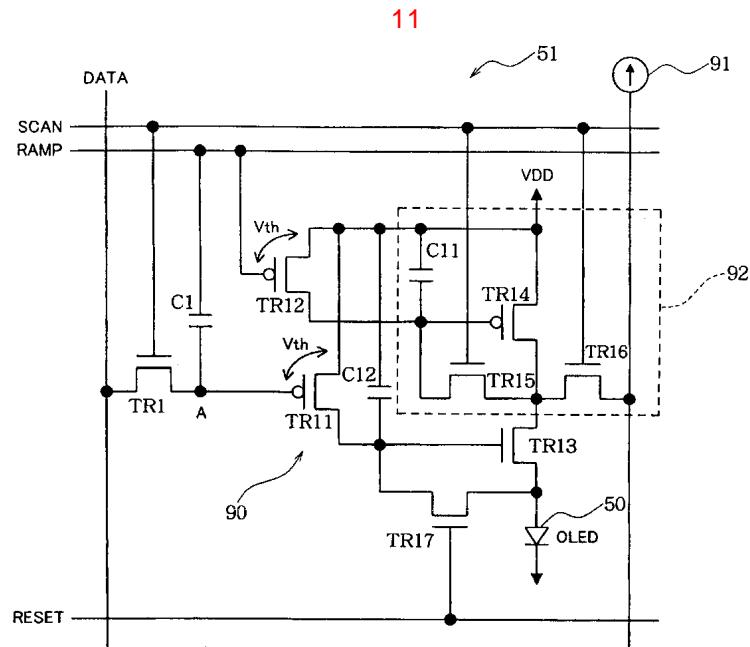
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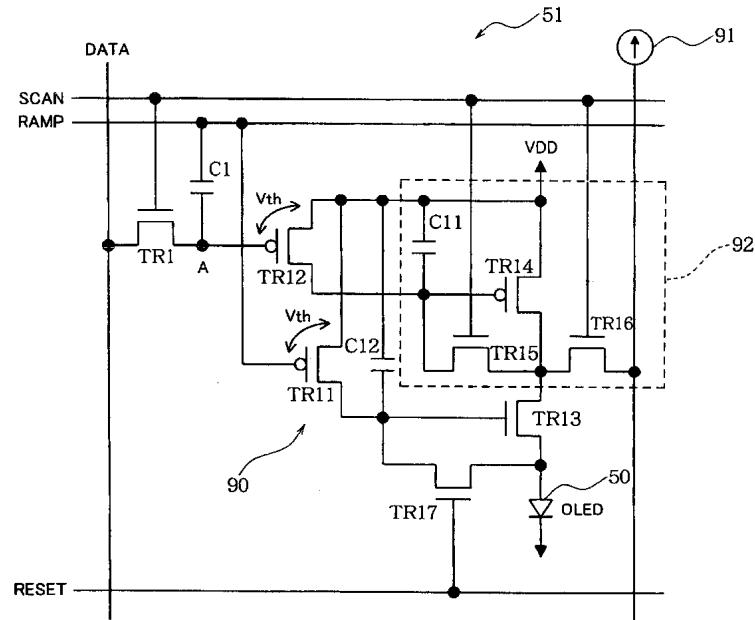


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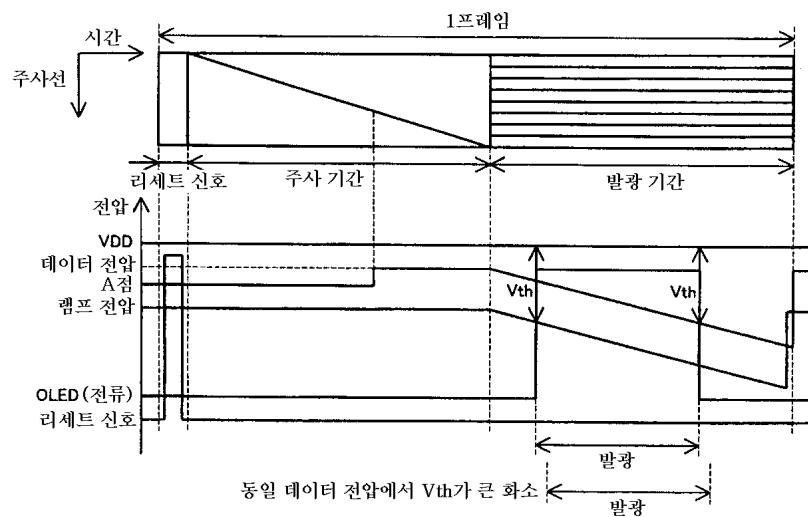




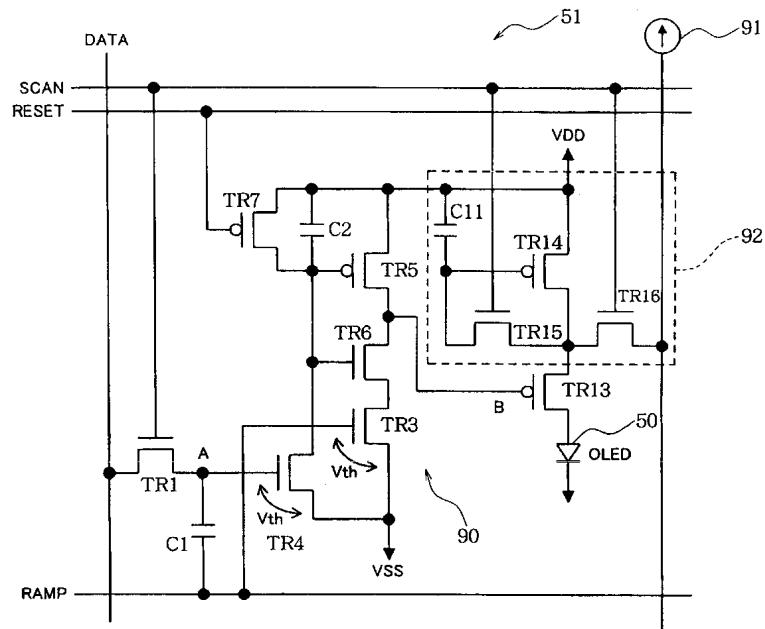
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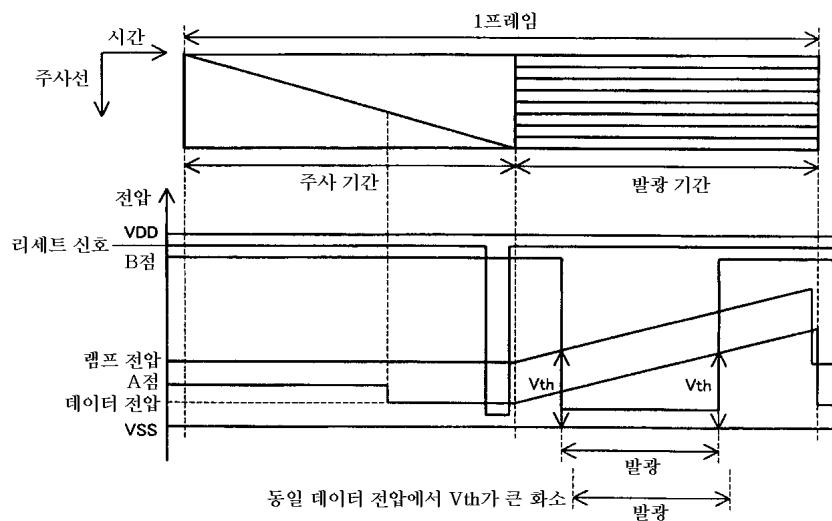
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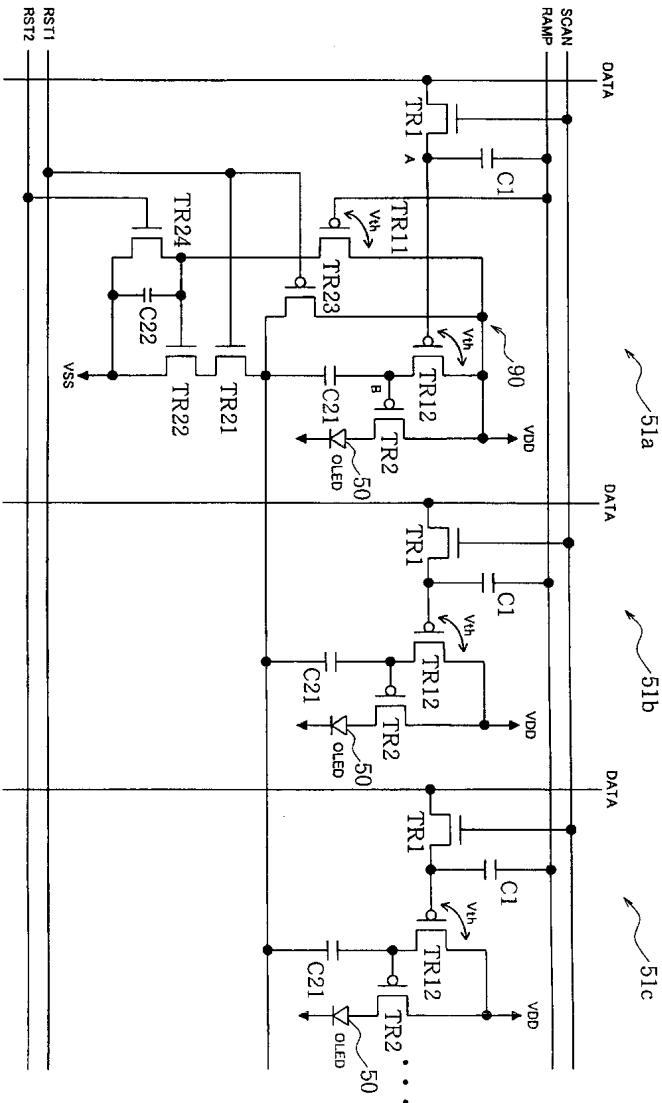
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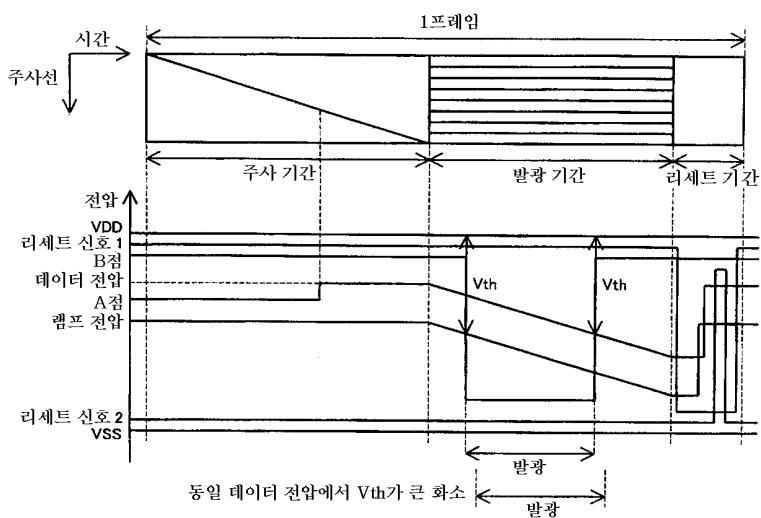
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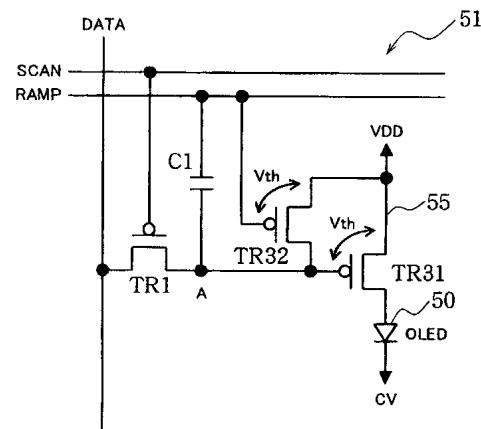
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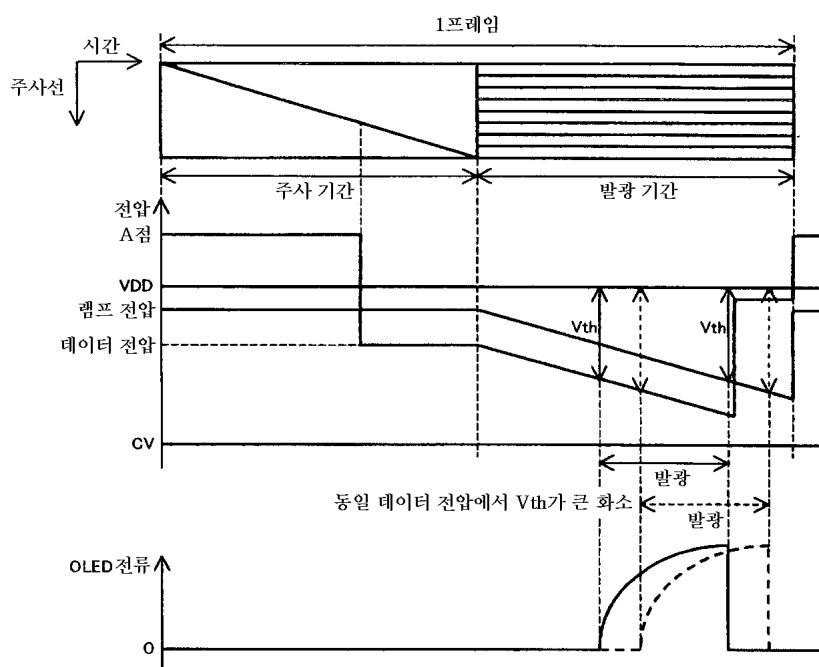
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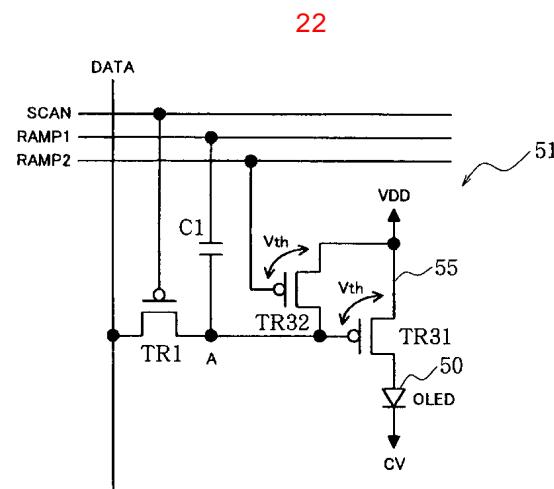
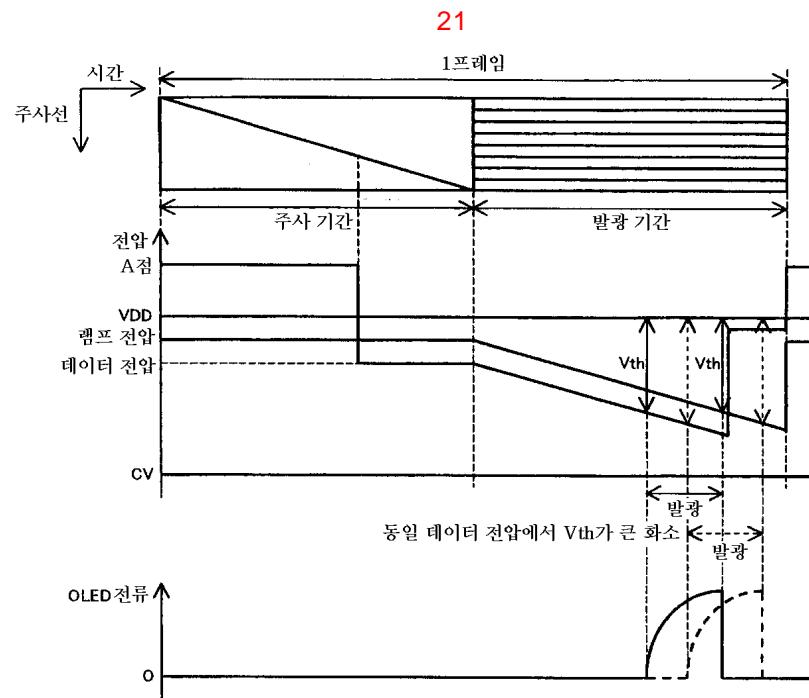


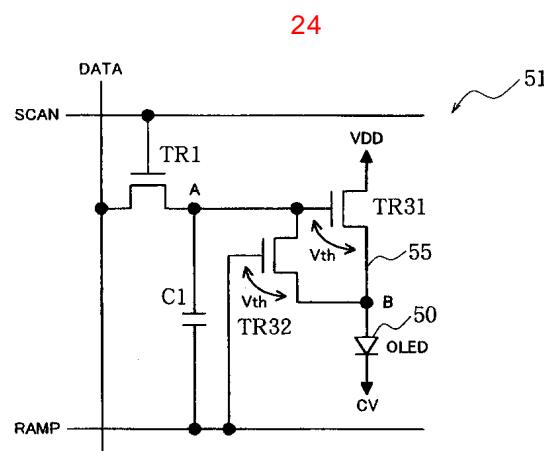
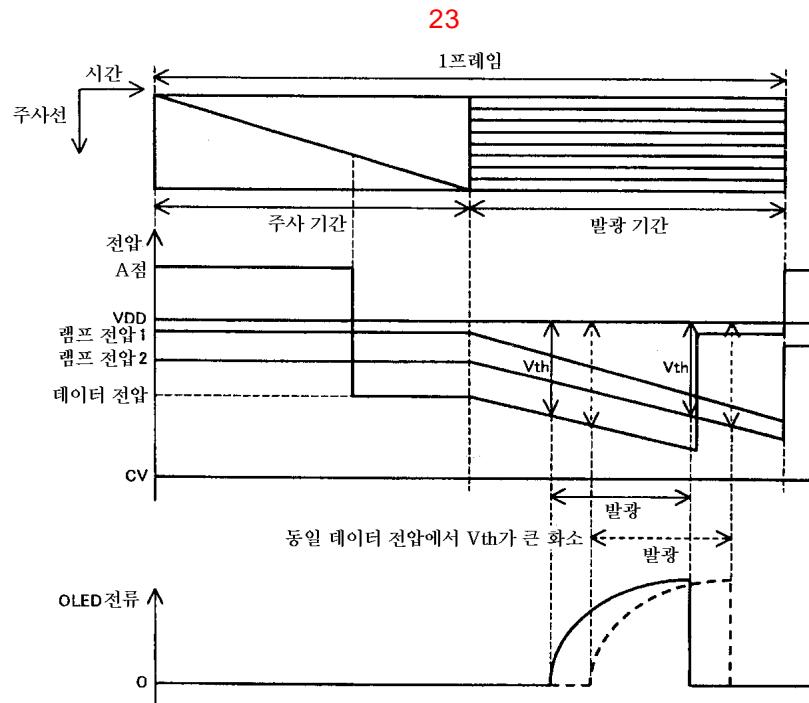
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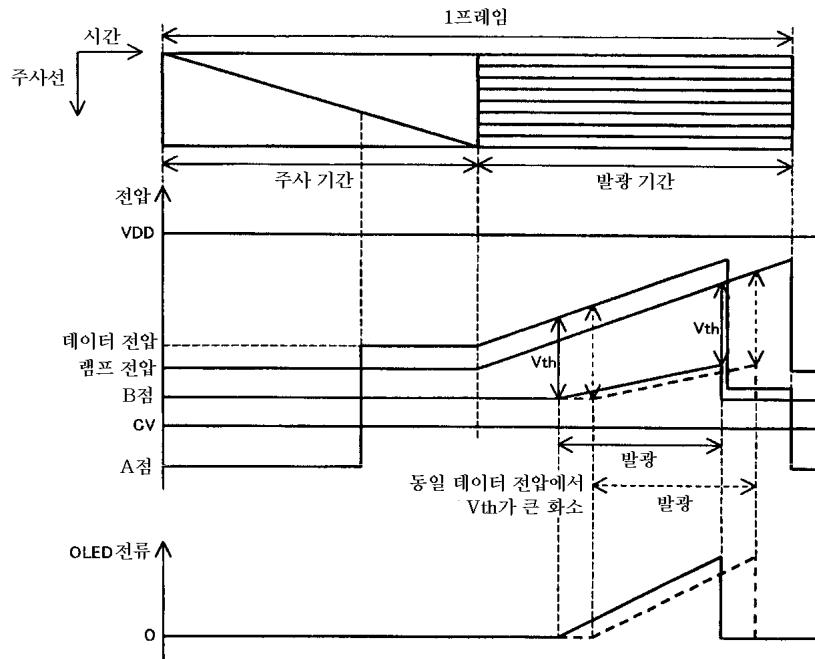
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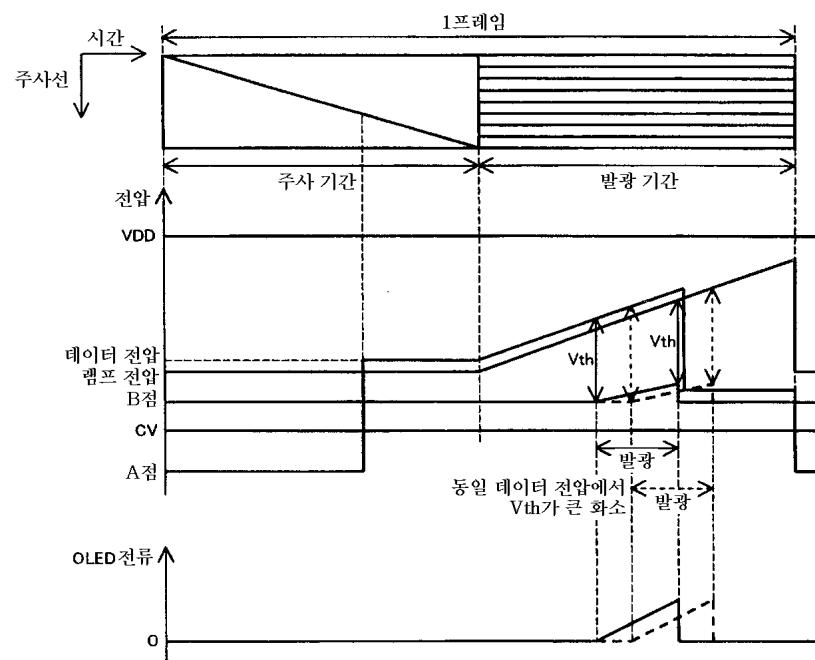




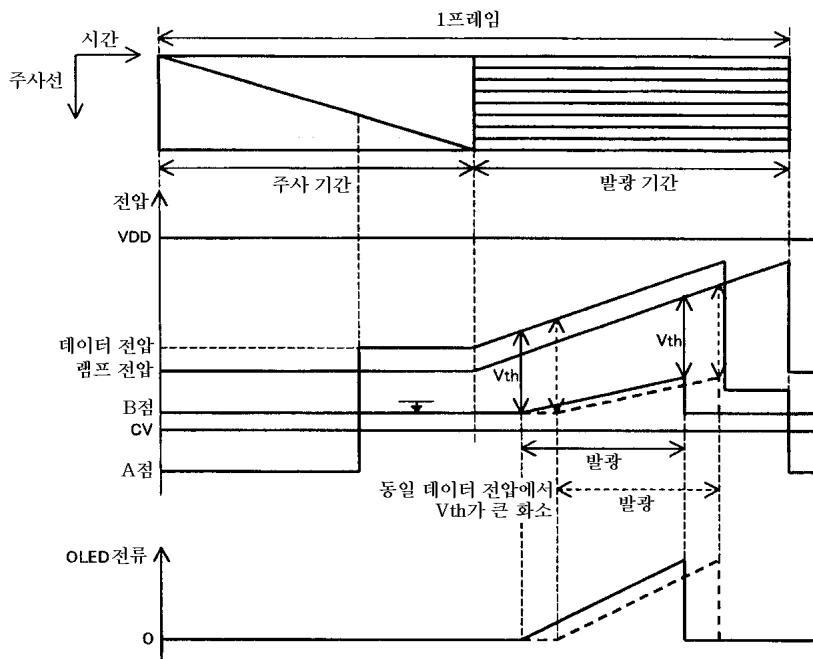
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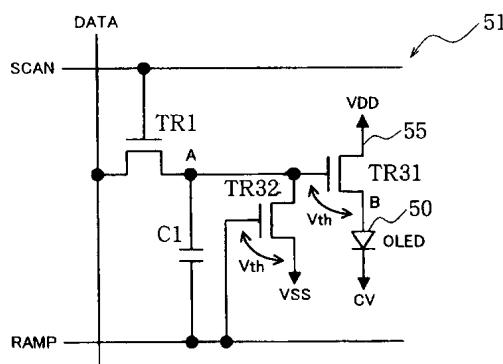
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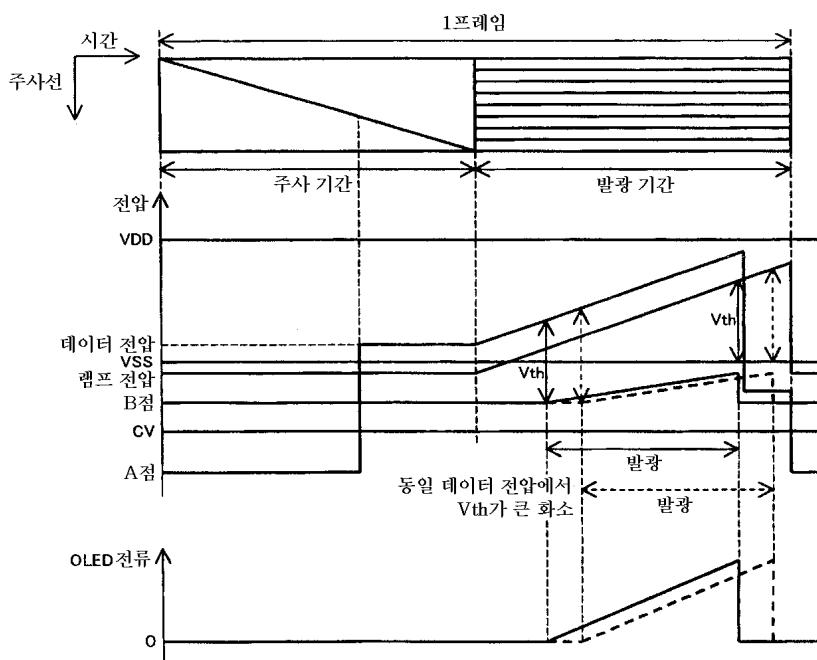
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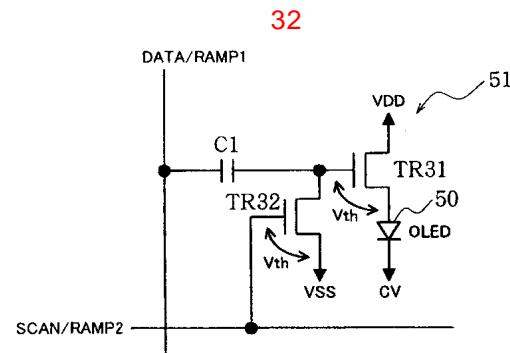
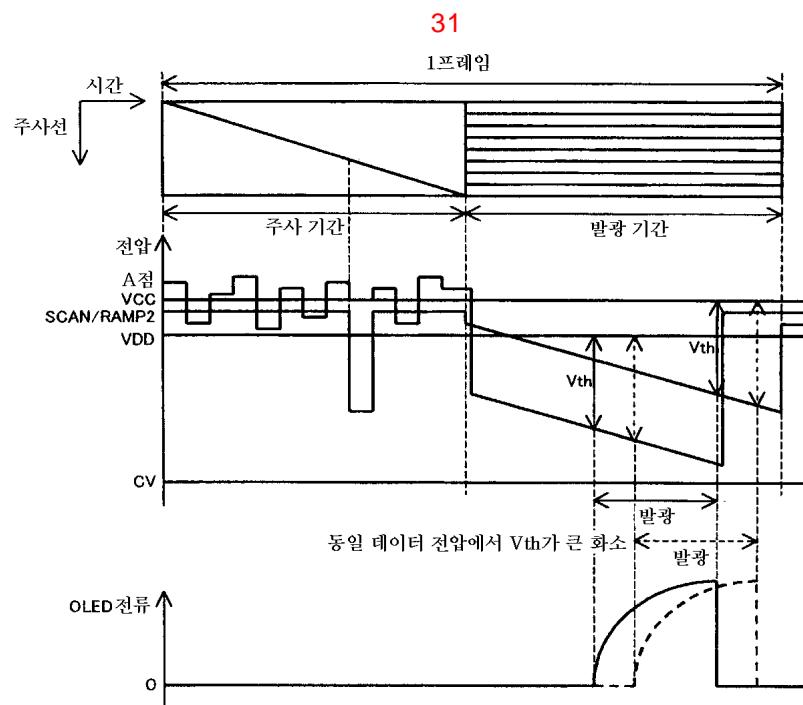
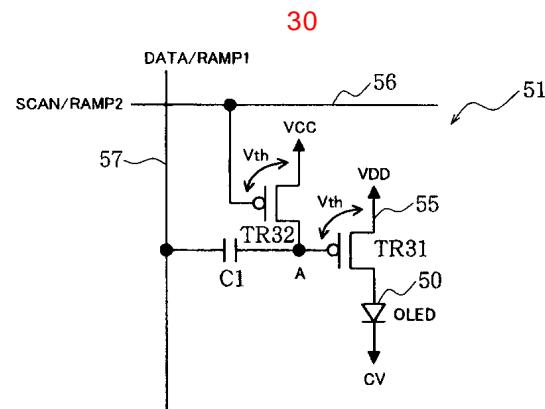


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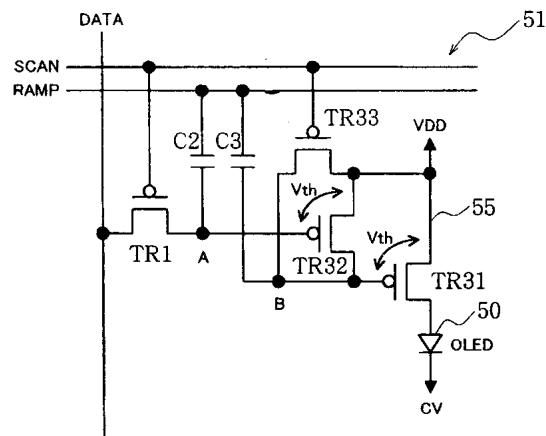


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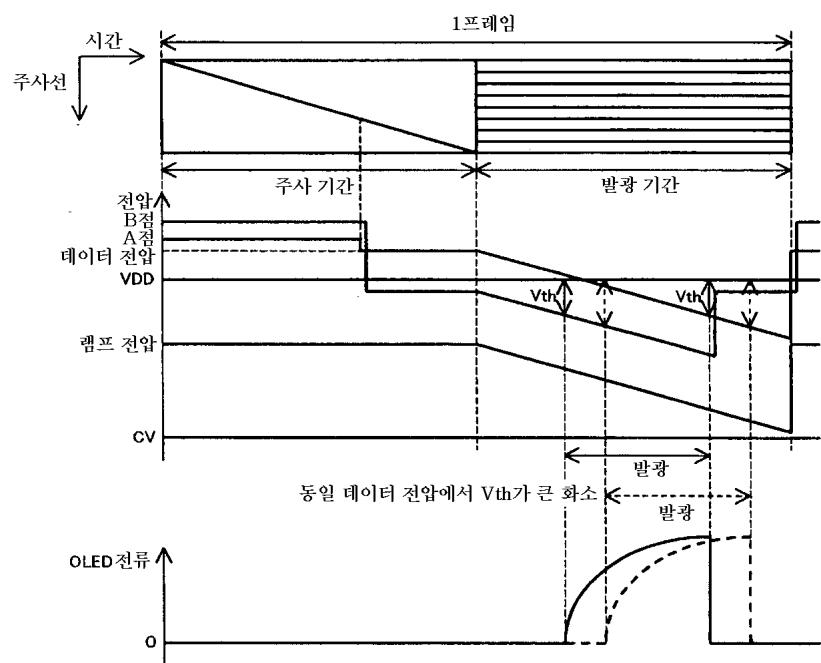




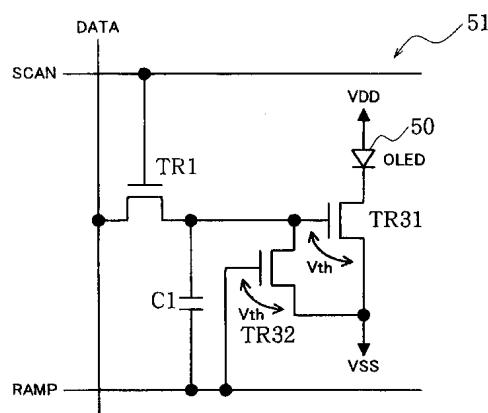
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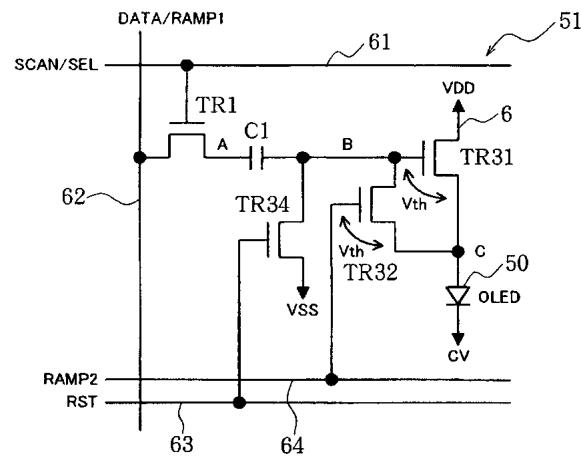
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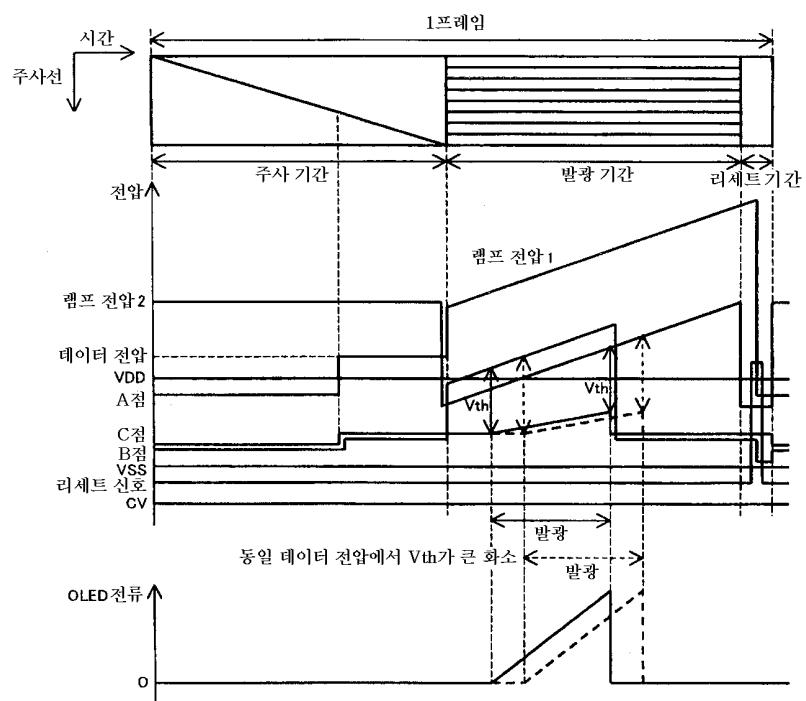
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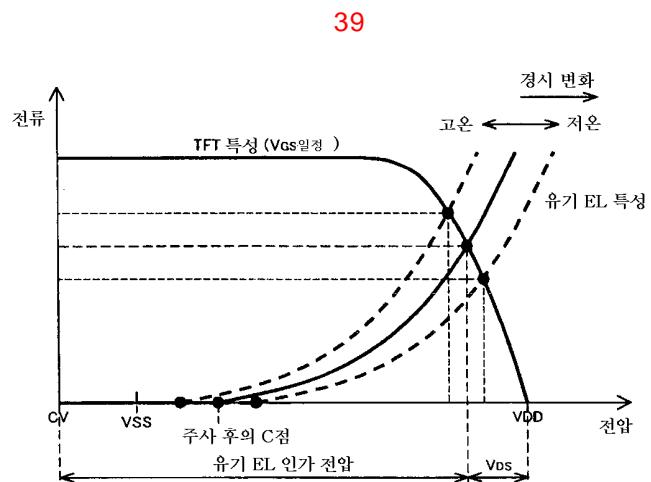
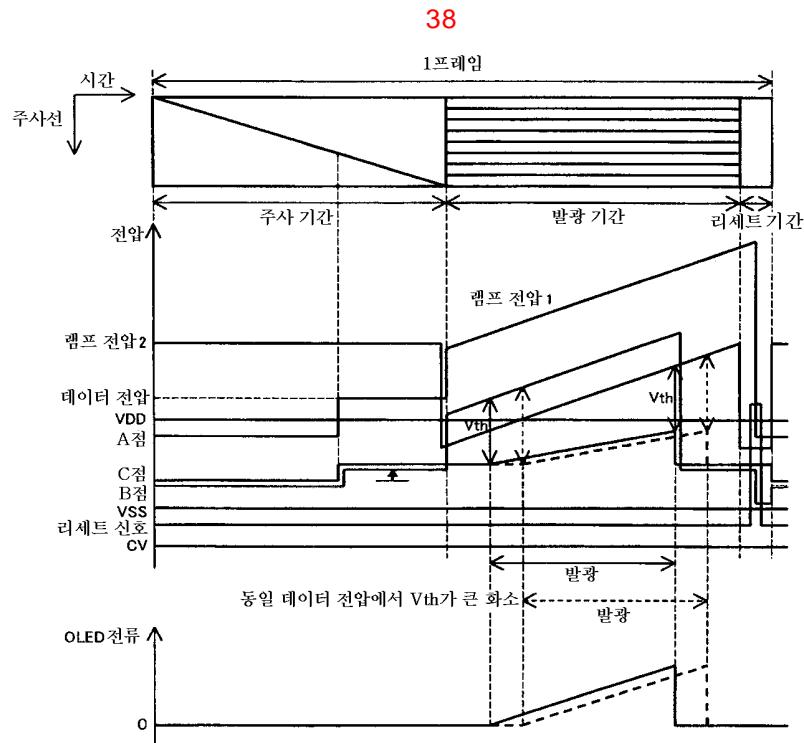


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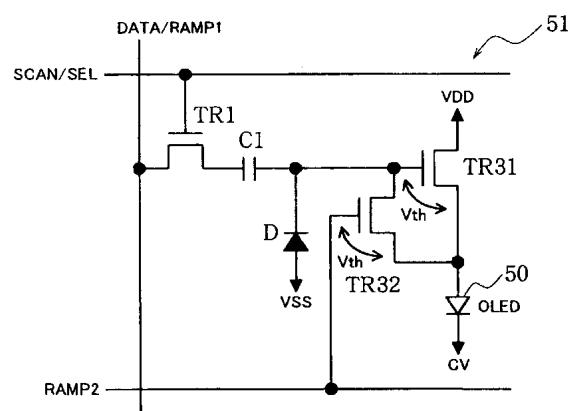


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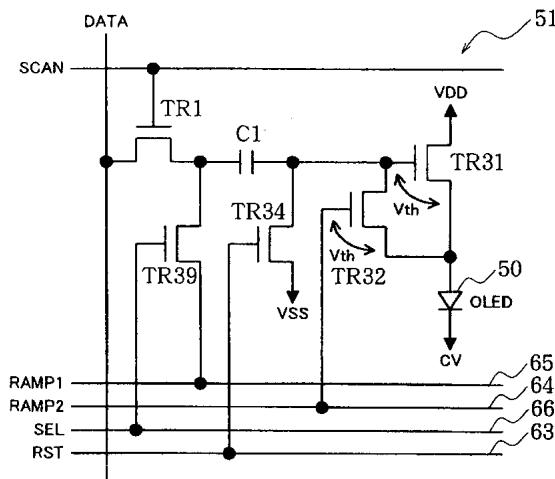




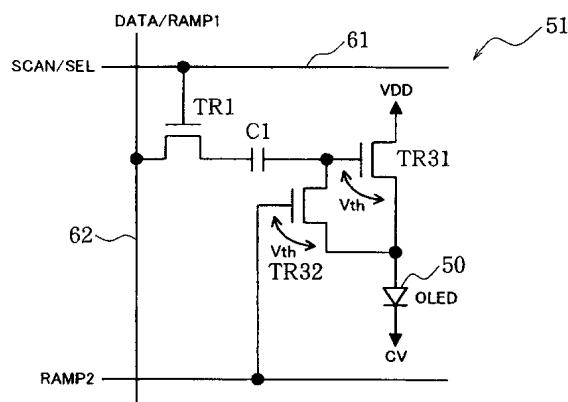
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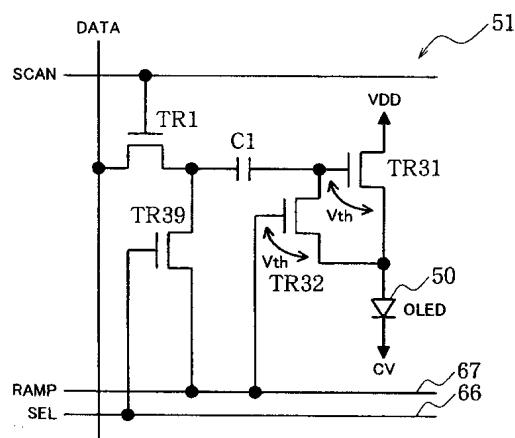
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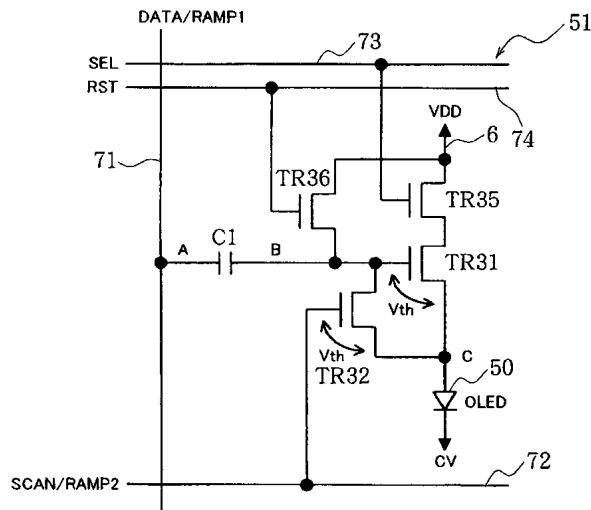
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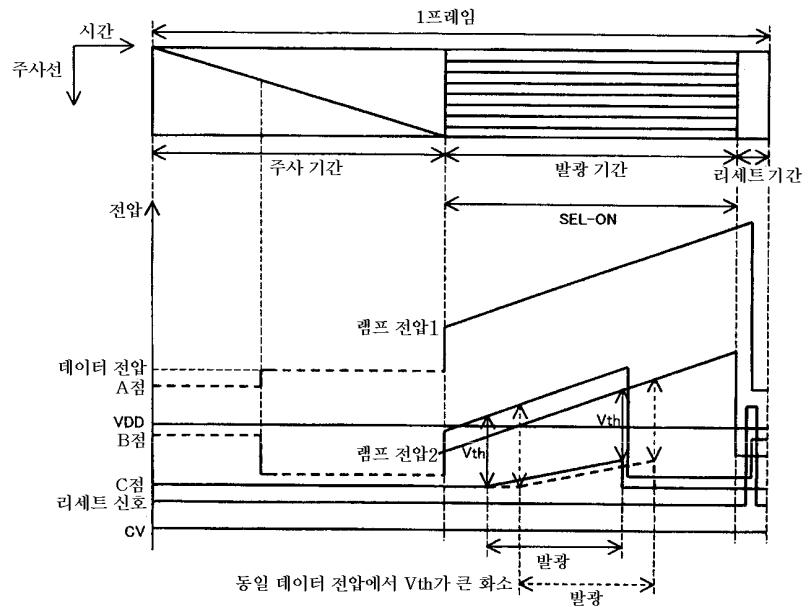
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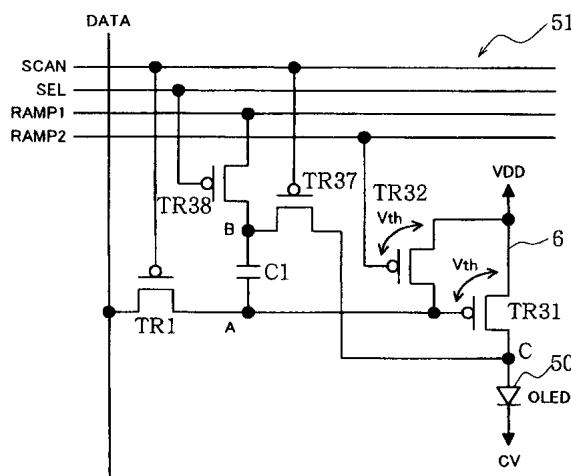
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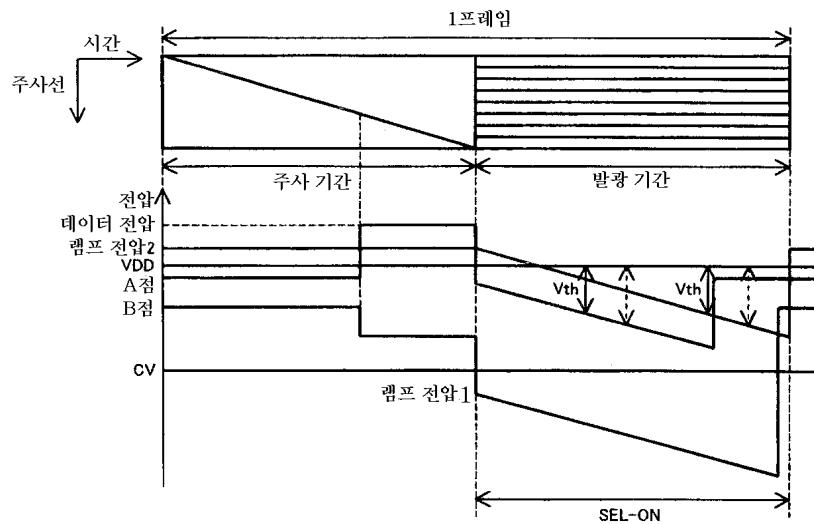
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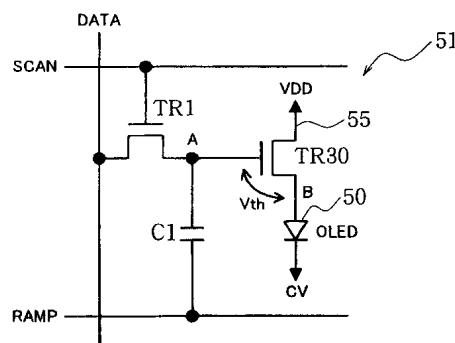
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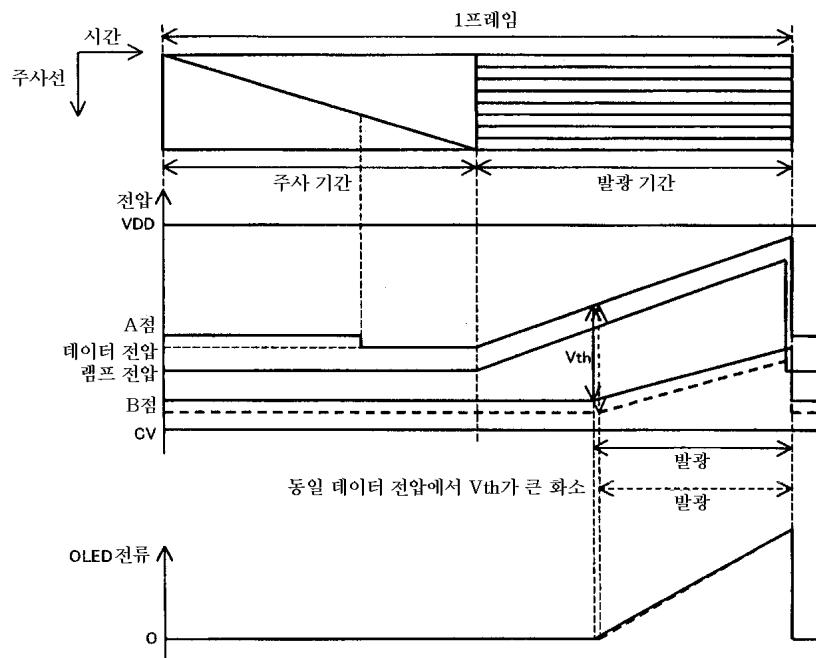
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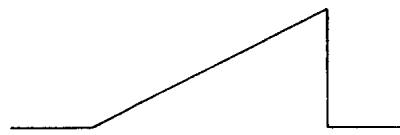


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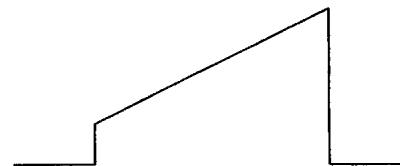


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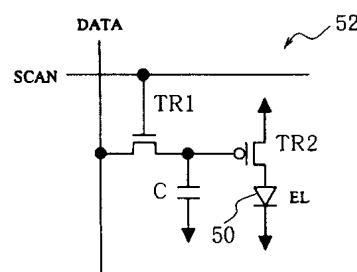
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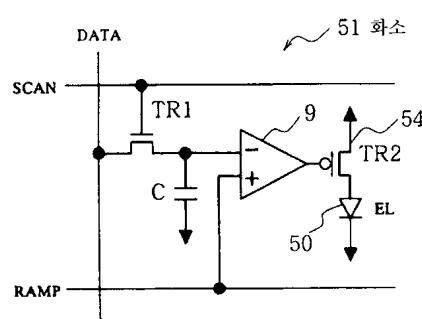
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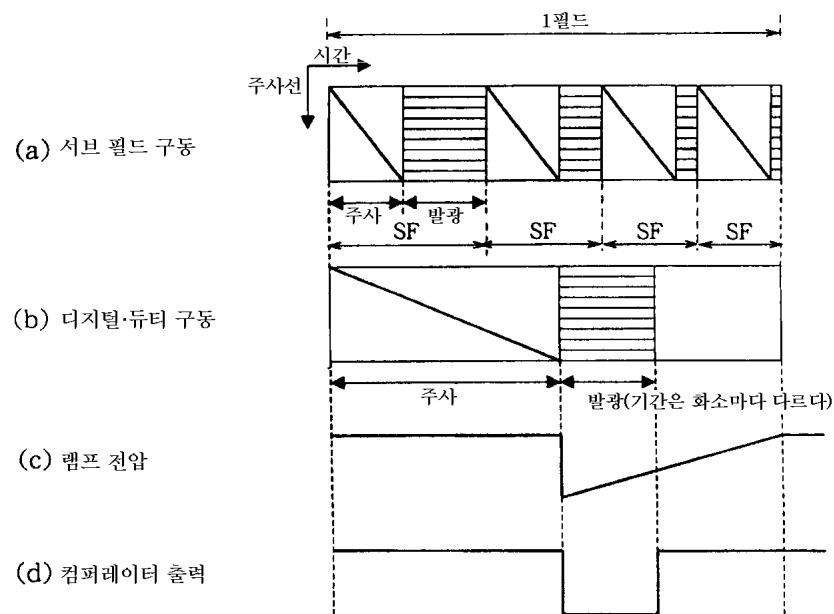
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53



专利名称(译)	有源矩阵驱动型显示装置		
公开(公告)号	KR1020040067965A	公开(公告)日	2004-07-30
申请号	KR1020040003732	申请日	2004-01-19
[标]申请(专利权)人(译)	三洋电机株式会社 山洋电气株式会社		
申请(专利权)人(译)	三洋电机有限公司是分租		
当前申请(专利权)人(译)	三洋电机有限公司是分租		
[标]发明人	YAMASHITA ATSUHIRO NOGUCHI YUKIHIRO 노구찌유끼히로		
发明人	야마시타아쓰히로 노구찌유끼히로		
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摘要(译)

关于根据本发明的有源矩阵驱动型显示装置的每个像素 (51) 包括控制晶体管TR3，其包括用于刻录的晶体管TR1，电容元件C1和控制脉冲宽度调制控制电路 (90)。用于驱动电容元件C 1的输出电压的晶体管TR2的导通/截止通过灯电压进行脉冲宽度调制，其中脉冲宽度调制控制电路 (90) 到达，晶体管TR4用于截止控制。用于刻录的晶体管TR1变为晶体管TR2，用于具有围绕有机电致发光显示器 (51) 导通的驱动，以及有机电致发光显示器 (51) 作为导通/截止和导通状态，施加扫描电压。关于电容元件C 1，施加数据电压，因为对于用于刻录的晶体管TR1，导通状态是。显示面板，扫描驱动器，灯电压，电容器。

